

Remarks

Claims 1-10 are pending in the instant application. All are rejected. None are amended herein.

Rejection Under 35 U.S.C. §102(b) Over Klimasauskas (USPN 6,110,214)

Claims 1-3 and 7-10 are rejected on the ground of anticipation over Klimasauskas. The rejection is respectfully traversed.

It is noted that Claim 1 recites “[a] method of *characterizing* a number of potential benefits” (emphasis added) that comprises, among other steps, “for each group of activities, determining a *probability distribution on net present savings* that corresponds with implementation of the group of activities” (emphasis added). It is submitted that Klimasauskas is directed toward optimization rather than *probabilistic modeling*. That is, Klimasauskas is directed toward a system that identifies an optimum set of maintenance activities rather than *characterizing* with a probability distribution on net present savings an implementation of a set of maintenance activities.

The distinction is significant. The system of Klimasauskas is directed toward point analysis (Klimasauskas at column 19, lines 15-22) to identify and output what is considered to be an optimized set of activities, i.e., “the solution with the smallest objective function is output to the user before the routine of FIG. 12 is terminated” (Klimasauskas at column 20, lines 3-5). The “solution” in Klimasauskas is a particular set of maintenance activities, meaning that the “solution” is a listing of the activities that are suggested by the system as being optimal. Klimasauskas includes no disclosure whatsoever of *characterizing* for a set of maintenance activities a probability distribution on net present savings, as is recited in Claim 1. Again, Klimasauskas is directed solely toward optimization, i.e., the identification of an optimum set of activities, rather than *probabilistic modeling* with respect to a set of activities.

The Examiner points to column 20, lines 45-56 of Klimasauskas as providing support for the Examiner’s contention that Klimasauskas discloses “for each group of activities, determining a probability distribution on net present savings that corresponds with implementation of the group of activities” as is recited in Claim 1. Applicant would respectfully disagree. The indicated passage of Klimasauskas is directed solely toward optimization of *compiled computer code* which, in the indicated passage, involves an improved logical loop

comprising eleven (11) instructions as opposed to other versions that are less efficient and require thirteen (13) or more instructions. That is, this passage indicates how to reduce computing requirements of a repetitively-performed routine by reducing the quantity of instructions in the loop that must be executed. The indicated passage has nothing whatsoever to do with any particular groups of activities or the determination of a probability distribution on net present savings for a group of activities.

It is thus submitted that the rejection of Claim 1 on the ground of anticipation over Klimasauskas has been successfully overcome. Inasmuch as Claims 2-3 and 7-10 each depend directly or indirectly from Klimasauskas, it is likewise submitted that the rejection of such dependent claims on the ground of anticipation over Klimasauskas has been successfully overcome. Withdrawal of the rejection is thus kindly requested.

Apart from its dependence from Claim 1, it is submitted that Claim 2 is allowable since Klimasauskas includes no disclosure of, for each operational parameter, characterizing the parameter both based upon an assumption of baseline activity and based upon an assumption of implementation of a group of activities. The Examiner points to Claim 1 of Klimasauskas as providing support for the Examiner's contention that Klimasauskas contains such a disclosure. Applicant would respectfully disagree and would point out that Claim 1 is merely directed toward a method of modeling a maintenance task comprising collecting input parameters, generating derived variables, and applying a primary analyzer to the parameters and variables to generate outputs. Claim 1 has nothing whatsoever to do with characterizing operational parameters both based upon an assumption of baseline activity and based upon an assumption of implementation of a group of activities. It is thus submitted that Claim 2 is allowable apart from its dependence from Claim 1.

It is also submitted that Claim 3 is allowable apart from its dependence from independent Claim 1. The Examiner takes the position that column 19, lines 15-38 of Klimasauskas disclose "wherein the said performing a plurality of probabilistic simulation sampling trials includes performing a plurality of Monte Carlo trials", as is recited in Claim 3. Applicant would respectfully disagree. While Klimasauskas mentions "Monte Carlo", it is noted that such "Monte Carlo" operations are described as being an alternative to Dynamic Hill Climbing (DHC), which is itself directed toward an "optimization process" (Klimasauskas, column 19 at line 22) using point analysis. The "Monte Carlo" mentioned in Klimasauskas is

thus not for the purpose of “performing a plurality of *probabilistic simulation* sampling trials” (emphasis added) as is recited in Claim 3. and rather is merely employed for the purposes of performing point analysis. It is thus submitted that Claim 3 is allowable apart from its dependence from independent Claim 1.

It is also submitted that Claim 9 is allowable apart from its dependence from independent Claim 1. The Examiner takes the position that column 21, lines 15-24 of Klimasauskas discloses “identifying for each goal a set of activities which together comprise a strategy for achieving the corresponding goal”. Applicant would respectfully disagree. The indicated passage is directed merely toward statements that the description in Klimasauskas of the data that is collected with respect to a semiconductor plant is representative only, and that variables, optimization goals, and variable limits can be changed as needed. The passage has nothing whatsoever to do with identifying a number of activities which together comprise a *strategy* for achieving a corresponding goal. It is thus submitted that Claim 9 is allowable apart from its dependence from independent Claim 1.

It is also submitted that Claim 10 is allowable from its dependence from independent Claim 1. The Examiner points to column 9, line 65 through column 10, line 12 of Klimasauskas as providing support for the Examiner’s contention that Klimasauskas discloses “wherein the activities of at least one of the sets of activities together have a synergy” as is recited in Claim 10. Applicant would respectfully disagree. The indicated passage of Klimasauskas is directed solely toward the selection of candidate transformations in a derivation of variables, and no interconnection is indicated as existing among the transformations or among the variables. The passage has nothing whatsoever to do with the selection of various activities that together have a synergy. It is thus submitted that Claim 10 is allowable apart from its dependence from Claim 1.

Rejection Under 35 U.S.C. §103(a) Over Klimasauskas In View of Gray (US 2003/0093347)

Claims 4-6 are rejected on the ground of obviousness over Klimasauskas in view of Gray. Inasmuch as Claims 4-6 each depend indirectly from Claim 1, which is submitted to be allowable, Claims 4-6 are likewise submitted to be allowable. The instant rejection of Claims 4-6 on the ground of obviousness is thus respectfully requested to be withdrawn for this reason. The rejection of Claims 4-6 on the ground of obviousness is moreover traversed for a number of additional reasons.

The Examiner concedes that Klimasauskas fails to disclose the type of Monte Carlo trial recited in Claim 4. The Examiner takes the position that Gray discloses the generation of parameters to derive prices and values, and the Examiner points to paragraphs [0373] and [0374] as providing support for this position. It is submitted, however, that neither Klimasauskas nor Gray includes any express disclosure of the generating of random numbers, the calculating of a baseline financial effect, the discounting of a baseline financial effect to a present day baseline value, the calculating of a strategy financial effect, the discounting of a strategy financial effect to a present day strategy value, or the subtracting of a present day strategy value from a present day baseline value to determine a net present savings amount for a trial, as is recited in Claim 4. The Examiner's suggestion that Gray discloses calculating and assessing the economic financial risk associated with government and monetary authorities does not constitute a disclosure in Gray of the elements recited in Claim 4. The rejection of Claim 4 on the ground of obviousness is thus submitted to have been overcome.

Regarding Claim 5, the Examiner takes the position that column 15, line 45 through column 16, line 12 of Klimasauskas disclose "characterizing the operational parameter with a probability density function" as is recited in Claim 5. Applicant would respectfully disagree. It is submitted that the disclosed and claimed concept relates to the application of classical Bayesian probability theory to generate a probability distribution. In contrast, the indicated passage of Klimasauskas is directed toward the use of fuzzy set theory in order to reflect uncertainty in data. It is submitted that the two are completely separate approaches, and it is also submitted, therefore, that Klimasauskas does not involve a probability density function as recited in Claim 5. The rejection of Claim 5 on the ground of obviousness is thus respectfully submitted to have been overcome.

Regarding Claim 6, the Examiner concedes that Klimasauskas does not disclose the generation of random numbers that are distributed in accordance with a probability density function of an operational parameter, but contends that Gray provides such a disclosure. Applicant would respectfully disagree. It is submitted that Gray is directed generally toward financial analysis and includes no express disclosure of, for an operational parameter, generating random numbers over the course of a plurality of Monte Carlo trials to result in a set of values for the parameter that are distributed in accordance with the probability density function of the parameter. The Examiner again identifies paragraphs [0373] and [0374] as providing support for

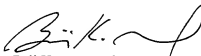
the Examiner's contention, but it is submitted that such paragraphs at most are directed toward the generation of parameter values and include no disclosure whatsoever of the generation of random numbers that result in a set of values for an operational parameter that are distributed in accordance with a probability density function thereof. The rejection of Claim 6 on the ground of obviousness is thus respectfully submitted to have been overcome.

Applicant would submit that the rejection of Claims 4-6 on the ground of obviousness has been successfully overcome. Withdrawal of the rejection is thus kindly requested.

Conclusion

Claims 1-10 are submitted to be in condition for allowance. If any matters remain unresolved, a telephone call to the undersigned would be welcomed.

Respectfully submitted,



Brij K. Agarwal
Registration No. 43,507
Eckert Seamans Cherin & Mellott, LLC
600 Grant Street, 44th Floor
Pittsburgh, PA 15219
Attorney for Applicants
(412) 566-6183

January 30, 2008